

ABSTRACT OF THE DISCLOSURE

An improved method and apparatus for rendering curved surfaces in a graphics system. The appearance of a curved surface is created by varying color shades across an object. The graphics systems represents each primary color with fewer than eight bits. The present invention maintains smooth transaction between color shades despite using fewer than eight bits to represent color. An eight bit color shade value is truncated, with the most significant bits being saved and used as a color value. The least significant bits that are truncated are used to determine which of the adjacent color values to use to render pixels. Thus, if five bits are saved and used to represent a color, the three least significant truncated bits are used to determine the appropriate mix of the closest five bit shades. The three truncated bits are used to select an entry from a ramp table and a control signal from a look-up table selects a bit from the selected ramp table entry. The selected bit is used to determine which of the closest five bit shades to use for rendering a pixel.